# FDOT Automated Quantities -Chapter 1 Introduction



Denise J Broom FDOT Production Support Office - CADD

# **Objectives**

- Introduce the FDOT Automated Quantities Course Manual
- Discuss the Automated Quantities Workflow
- Review FDOT Standards, CADD Standards, and FDOT Workspace
- Create and Set Up the QTDSRD file



### Introduction

- Webinar series to document the FDOT Automated Quantities Course
  - Available on the CADD office website

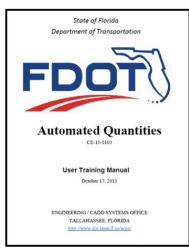
#### **Engineering/CADD Systems Office**



FDOT CADD Training Manuals Engineering / CADD Systems Office (ECSO) provides a full line of training for the various customization of the Florida Department of Transportation (FDOT) Computer Aided Drafting & Design (CADD) Software suite delivered to assist the CADD users in the design process of FDOT projects. The following are the training manuals for use within the course or to use in self help for the individual user. They are complete with data sets for immediate use.

Feel free to send any comments, suggestions, and questions to ECSO: ecso.support@dot.state.fl.us

Tress Course ID	Manual	Updated
CE-11-0136	<b>B</b> FDOT Digital Delivery	01/13/2016
	**Note; Pending approval of FDOT policy statement.	
CE-11-0103	B FDOT Automated Quantities	10/17/2015
CE-11-0120	<b>B</b> FDOT GEOPAK Drainage - for Design	03/12/2015
CE-11-0121	♣ FDOT GEOPAK Drainage - for Plans Preparation	03/12/2015
CE-11-0122	■ FDOT GEOPAK Drainage Complete	03/12/2015
CE-11-0114	⊞ MicroStation Essentials Part I	
	**Note: Web Based Training (WBT) requested through your District Training Coordinator.	
CE-11-0115	⊞ MicroStation Essentials Part II	
	**Note: Web Based Training (WBT) requested through your District Training Coordinator.	
CE-11-0137	♣ FDOT Plan Development Workflows	02/19/2016
CE-11-0116	FDOT Right-of-Way Mapping CADD Training	09/14/2011
CE-11-0138, CE-11-0139, CE-11-0140	♣ FDOT Roadway Design and 3D Modeling	10/27/2015



#### **Topics Covered:**

- D&C Manager
- Drawing Shapes Representing Pavement and Sidewalk areas
- · Generate Quantities in D&C Manager
- · Linked Data Manager
- · Generate Plan Summary Boxes
- · Quantity Manager Basics
- · Pay Items and Quantities
- Quantity Manager Reports
- · Export Data to TRNS\*PORT

#### Prerequisites:

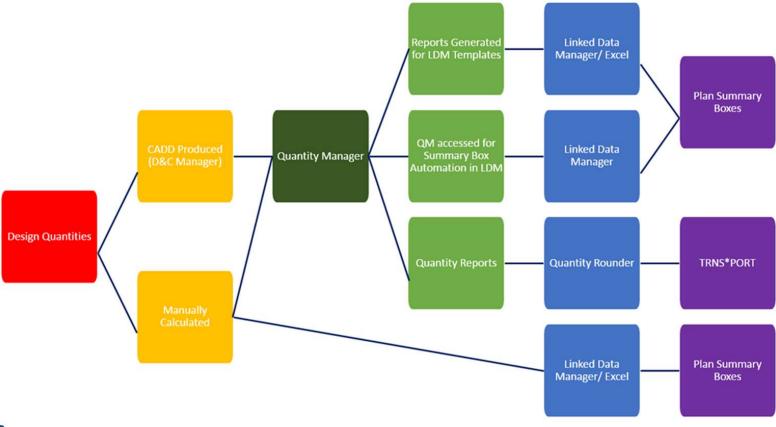
 FDOT Roadway Design and 3D Modeling SS3 – Basic Training

FDOT Automated Quantities course documentation is currently provided in Adobe Acrobat PDF format. These files require the free Adobe Acrobat plug-in for your browser. The Acrobat plug-in can be obtained from **Adobe Systems Inc.** 

FDOT Automated Quantities Documentation			
File Description	Size	Updated Date	
<b>B</b> Documentation	4.17 MB	10/17/2015	
<b>≛</b> Dataset	71 MB	10/17/2015	



## Automated Quantities Workflow





### FDOT Standards

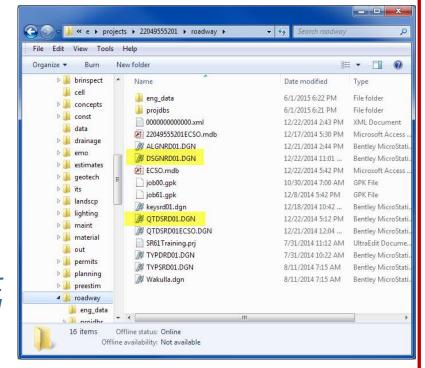
- Specifications
- Design Standards
- Basis of Estimates
   Manual
  - Master Pay Item List
  - Pay Item Computation Methods
  - Chapter 8, Plan Summary Boxes
- Plans Preparation Manual
- CADD Manual





#### CADD Standards

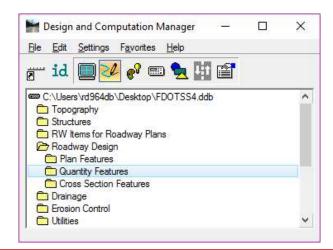
- Files
  - DSGN\*\*
    - Linear and Each items
  - QTDSRD\*\*
    - Area/Tonnage/Cubic Yard items
- Quantity Design Files are to be located in the appropriate Discipline directory of the project. This also applies to the Quantity Manager \*.mdb file.
- Create with the Create File/Project tool to insure correct locations and seed files.

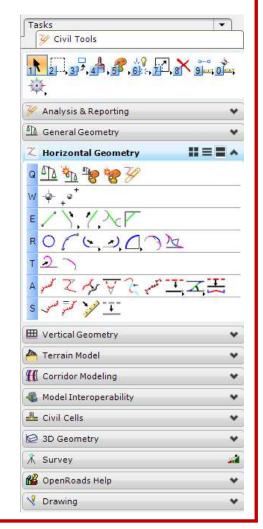




### CADD Standards

- Recommended Tools
  - Civil Tools Features
    - Native Style = D&C Manager Settings
  - Design & Computation (D&C) Manager
- Uses correct symbology for CADD Standards
- Automates quantity calculations







# FDOT Workspace

- FDOT Menu
- Standard CellApps Actions Design Apps Roadway 🔯 🤝 🔝 💽 🕡
- Standards
  - Links to Documentation for Standards
- Action
  - Label Shapes with ID
  - LDM
  - AASHTOWare Project Preconstruction links
- Quantities Task Menu
  - Located under the FDOT
  - Collection of Quantity related tools all in one place



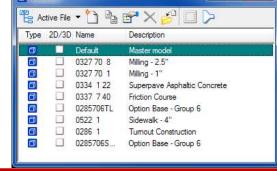


# QTDSRD\*\* File

- Recommended...
  - Setting up the Default model with all the reference files attached that may be needed for calculations.



 Copy the set up Default model to create the models for individual quantities/pay items.





# Questions???

Thank-you for joining today's session.

Need some HELP? Contact me...

(850) 414-4751

E-mail: Denise.Broom@dot.state.fl.us

OR: ecso.support@dot.state.fl.us

http://www.dot.state.fl.us/ecso

#### FDOT CADD Support Forum On-line

http://communities.bentley.com/communities/user\_communities/fdot\_cadd\_support/default.aspx

